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Consultation Paper

PROSPERITY INITIATIVE

Issues for Discussion

LEARNING WELL... LIVING WELL

Government of Canada / Gouvernement du Canada

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LEARNING WELL...
LIVING WELL

LEARNING:

IN THIS PAPER THE WORD *SKILLS* AND THE TERM *SKILLS and knowledge* are used as a kind of shorthand to include all the results of learning — skills, knowledge, attitudes and abilities. The term *learning system* means the formal ways that learning is provided — schools, colleges, apprenticeship, employee training in firms, universities, and other means.

PREFACE

This fall, we begin consulting Canadians on the two great challenges facing our country: national unity and our future prosperity. The two are linked closely — a strengthened economic union is key to both ensuring greater prosperity for all Canadians and renewing Canadian unity. Although the government's constitutional proposals address some of the issues, as described in the proposals released September 24, 1991, in both cases the views of Canadians will be central to defining and taking the actions that are required. Each is important enough, however, to warrant individual attention and debate.

This paper is not about jurisdictional issues. The federal government accepts fully the exclusive jurisdiction of the provinces in the field of education. Such jurisdiction reflects the diversity of Canada and the close connection between education and historical and cultural reality. The federal government has gone further and proposed to extend this exclusive jurisdiction to include training. At the same time, the government believes it has a role to play in promoting excellence and supporting provincial efforts to improve the acquisition of knowledge and skills. These are essential elements of our future prosperity and economic security.

With the release of this paper and *Prosperity Through Competitiveness*, the Government of Canada intends to stimulate a national discussion on the factors that determine our future prosperity. This discussion will take the form of series of consultations designed to give Canadians the widest possible opportunity to be heard and to participate in creating a consensus on ways to generate stable income and employment and to assure our economic security and prosperity in the future. The goal is to develop a consensus on a national action plan for the balance of the 1990s to be implemented by governments, business, labour and individual Canadians. This is an ambitious undertaking. The Government of Canada is committed to seeing it through.

Over the past several months, we have worked to obtain the broadest consensus possible on the key issues for discussion and the structure of the consultations. To this end, we sought the views of more than 60 business, labour, academic and social action groups, as well as of provincial governments. We wish to thank all those who participated in this process. Many constructive contributions and valuable insights were received and are reflected in this paper, thereby giving Canadians a better starting point for developing a plan of action.

Readers will note an absence of detailed recommendations and conclusions in this paper. Our thinking is that such results should be a product of the debate. The paper therefore asks a number of pointed questions on how we should address the problem.

Some provinces have launched consultation exercises of their own. This paper, and the process it supports, are designed to reflect this situation.

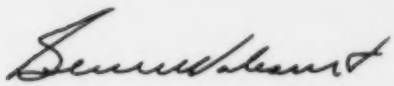
The word partnership appears frequently in the following pages and will be heard often during the consultations. Our success will require the cooperation of many, some of whom have differing opinions. All these differences will not be resolved. We need to work together to identify areas where common ground exists, build a consensus and take action. The issues presented for examination are not only vital to our future prosperity, but also they should provide the basis for achieving consensus.

These issues should be seen in a broad context. Economic success, prosperity, is

but a means to improving our quality of life. We want prosperity so that we can reach goals that are not measured in the Gross Domestic Product: strong social programs, a clean environment, a vibrant culture and interesting, well-paying jobs for all.

With these goals, how we achieve prosperity is a vital part of the puzzle. Discussion, consensus and partnerships will allow us to improve our competitiveness and learning system in a manner consistent with our ultimate goals. Competitiveness to some may mean harder work for less pay. This may be seen as contrary to our goals — this is not how we understand the term. Competitiveness means preparing Canada and Canadians for a high-skill, high-wage future. It means working smarter with better skills and greater technology. Improving our competitiveness will require change, some of it difficult, but these changes cannot be in the direction of worsening our quality of life.

There are signs that the old approaches to economic problems are not working. Making progress will require new thinking and approaches. This is what this paper and process are about.



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SUMMARY

CANADA'S FUTURE PROSPERITY, AND OUR ABILITY TO PROVIDE all citizens with a high quality of life, depends on our ability to compete successfully both at home and abroad. Our ability to compete — to produce and provide high quality goods and services — depends in turn on the willingness of Canadians to cooperate, to develop a renewed sense of partnership.

While there are many steps we must take to secure our future — issues which are also discussed in the companion document *Prosperity Through Competitiveness* — a critical element of future success will be our ability to ensure that all Canadians have the relevant skills needed to survive and thrive in a fast-changing economy.

This discussion paper is about learning. It is the federal government's contribution to the start of a dialogue about how Canadians acquire their skills and knowledge — and how our approach to learning can be improved to ensure that Canadians can enjoy the benefits of a globally competitive economy in the 21st century.

Discussion papers are usually issued as part of a process leading to new legislation or new government programs. This one is somewhat different. While changes will probably be needed in the way Ottawa deploys its $11-billion budget in support of training and education, a new public consensus on learning goals must precede such reforms. The primary aim of this paper, therefore, is to initiate a national, consensus-building discussion on targets and priorities for learning in Canada that will lead to an action plan.

Our learning system has served Canada well in the past. We have made significant progress over the past quarter century. But the needs of the future will be different. Studies are now painting a picture of future skills needs that simply cannot be met by our existing learning system.

Most Canadians, both in the classroom and at work, are not getting the level of skills and training they want and need. In comparison to many other industrialized countries, our human resources are underdeveloped and underutilized. The fundamental problems with learning in Canada are that, compared with other countries, there is not enough of it and we do not take seriously enough what we do have. Our prosperity depends on major improvements in the general level of skills held by all Canadians, as well as on having many more people with advanced and specialized skills.

Change will not happen unless the public demands change — large numbers of Canadians must find better ways of expressing their concerns and respect for learning. Too many Canadians do not yet have the tools to make learning a personal priority and an individual responsibility — as opposed to something that is *done to them* by various external agencies and institutions. Too many employers have not made learning an integral part of jobs. Such passive attitudes must give way to a more user-oriented approach to learning, because, in the final analysis, neither governments nor educators can alone create the necessary reforms. Only the demands of parents and students, and employers and workers can change Canada's learning system.

Canada has good educators and trainers. Their continued efforts in building better approaches to learning are essential. But their work must be supported by the public. We believe the public will welcome a new priority on learning — in the same way that it has, in recent years, placed a new priority on physical fitness or the need for a cleaner

environment. If Canada is to remain internationally competitive, we must somehow develop a learning culture — an environment in which millions of Canadians are personally committed to the idea of lifelong learning and have the means for expressing their needs in practical ways that will allow educators to respond. It is hard to imagine this happening unless certain structural barriers are removed and, more importantly, there is a broad consensus on educational priorities and targets.

The Job/Learning Connection

More and better learning means more and better jobs. Countless studies confirm this connection between a highly skilled work force and a high-wage economy. How well people live — be they Germans, Australians, Koreans or Canadians — depends on how well they learn.

In Canada, this connection between jobs and learning is not widely recognized. This is because, for most of this century, Canadians have been able to take their prosperity for granted. Our natural resources and our proximity to the U.S. market seemed to guarantee that we would always enjoy one of the world's highest living standards.

This assumption has been threatened in recent years. As the world moves toward a knowledge-based economy, Canadian jobs are being threatened by a new kind of competition — low-wage, low-skill competition is being replaced by high-wage, high-skill competition. Although we are still successful exporters of energy and raw materials, Canada is losing ground to industrial competitors who are simply better than we are at inventing, designing, manufacturing and marketing. Our competitors will gain not by undercutting us, but by outsmarting us.

Learning in Canada: A Report Card

Canada has made great educational strides in the past 25 years. More than two million Canadians are university graduates and nearly half of all adults have graduated from high school. Further, in a single recent year, more than three million Canadians enrolled in adult education courses.

Despite these significant achievements, too many Canadians still lack basic learning skills. Nearly four adults out of 10 cannot do math tasks or cope with written instructions, if they are unfamiliar or too complex. Three students out of 10 drop out of high school, adding to the growing pool of the unskilled unemployed. (In Japan, there was much public hand wringing when the drop-out rate fluctuated by a small fraction to just over 2 percent.) In the working world, Canadian companies spend far less proportionately on employee training and education than their counterparts in other industrial countries.

The twin imperatives of technology and demographics make this training gap all the more worrisome. Technology is spurring a trend toward *smarter* jobs — which means that opportunities for the unskilled are becoming scarcer than ever. Also, because there are fewer young people entering the labour force than in the baby-boom years, they cannot be counted on to provide the new skills that the economy demands. Increasingly, new skills requirements will have to be met by retraining people who are already in the work force. New skills, and a willingness and ability to acquire them, are critical if Canadians are to adjust successfully to growing international competition and the changing demands of the marketplace.

An Emerging Consensus

There is a growing consensus among educators, business people and policy makers that Canada's learning performance is simply not good enough to prepare us for the future. If we are to continue enjoying a high standard of living, we must improve greatly the level of basic skills of all Canadians and ensure that many more Canadians acquire advanced and specialized skills.

Basic skills include the ability to learn, to listen and communicate effectively, to work in teams, to solve problems and, of course, the ability to read, write and work with numbers.

Advanced skills include the ability to apply scientific and mathematical principles in the workplace; to operate comfortably in a technological environment; and the ability to keep learning, acquiring new skills to meet changing competitive conditions.

Millions of Canadians must demand access to basic skills, and many thousands more must acquire advanced and specialized skills — including members of groups who, in the past, have suffered from limited access to learning opportunities.

Why the Schools Cannot do it Alone

Many previous studies stress the role of schools, although much of the problem can be found among adult learners. These studies often criticize schools, teachers or curricula for perceived shortcomings in Canada's learning system. Such criticism is largely misplaced. Although there is plenty of room for improvement in such areas as academic standards and teacher qualifications, these are not the main issues. By and large, our schools and teachers ably perform the tasks that society assigns to them. The main issue is not what our schools achieve, it is what the Canadian public expects them to achieve.

Canadians do expect a lot from learning institutions, but these expectations are sometimes expressed ambiguously. For example, Canadians ask both too much and too little of our learning system. On the one hand, many Canadians demand that schools function like institutional parents — babysitting our kids in the younger years, providing basic social and health services, and counselling them on drugs and sex when they become teenagers. On the other hand, while Canadians want excellence and would never accept second-class status in learning, we appear surprisingly undemanding when it comes to the real business of learning. Opinion polls confirm that Canadian parents are generally quite satisfied with the educational status quo when it comes to their own children. Our learning system produces as many high-school drop-outs as it does university graduates, but the public has not demanded a reduction of the disturbingly high drop-out rate. It has not demanded (except through trade unions) that corporations play a much larger role in the learning system. It has not demanded that the system produce measurable results comparable to those of other countries.

Until there is a shift in the way the public articulates its learning needs, until Canadians start demanding a larger role for learning in their lives, our learning system probably will not change much.

Building a Learning Culture

Numerous studies demonstrate that successful students usually come from homes and cultures where a high value is placed on educational achievement. In the same way, workers tend to acquire new skills more effectively in companies where the corporate culture includes a strong commitment to employee training and on-the-job learning.

Somehow, we must develop in Canada a learning culture in which the values of education are prized for their cultural benefits and also for their impact on individual incomes and national prosperity.

We know from the experience of other countries what a strong learning culture

looks like. One of the key characteristics is that people spend more time in formal learning situations, at school and at work, than Canadians do. Some estimates indicate that Canadian workers receive only half as much on-the-job training as U.S. workers, and the U.S. figures are low by world standards. Some German children can spend 240 days a year in the classroom, compared to about 180 to 185 days for Canadian children. (Japanese children spend up to 243 days per year in the classroom; when the Ministry of Education proposed eliminating Saturday classes, parents and the media reacted with such horror that the proposal was withdrawn.)

Another characteristic of learning cultures is that learning activities and institutions tend to be regarded as investments rather than costs. There is usually a strong emphasis on scientific and technological subjects, both in classrooms and in workplace training. (In Canada, enrolment in key science and technology courses has been declining for years.) Another characteristic is that social support programs, such as unemployment insurance, have strong structural links with the learning system, so that joblessness becomes an opportunity for building new skills.

Building the System Around Lifelong Learning

Finally, and perhaps most importantly, learning cultures are built around the notion of lifelong learning. Much of Canada's educational arrangements are still based on the antiquated notion of *the three boxes* (the childhood and adolescent years, the working years, and retirement) in which nearly all formal learning occurs in the first box. A learning system for the 21st century must operate on the assumption that learning, training and education is a continuous, lifelong process.

In particular, a system based on lifelong learning would ideally:

- ensure that children entering school are ready to learn;
- prepare young people in schools with the tools needed for lifelong learning in a high-tech, globally interdependent world;
- ensure that students over the legal school-leaving age of 16 receive relevant work experience through internships or co-op programs, so that work becomes an integral part of the learning process, rather than a means of paying for it;
- make possible job-related educational upgrading for young people who have taken jobs, so that all young people could attain the equivalent of high-school graduation without necessarily returning to high school;
- find new ways to deliver training to those who are not comfortable in the classroom and other formal situations;
- provide employment skills as a main goal of social programs wherever this makes sense; and
- promote a workplace environment in which learning and retraining are regarded as routine, with flextime and job assignments structured to encourage learning.

What the System Needs

How can we start building the structures for lifelong learning in Canada? Obviously, many of the system's components are already in place, and programs are under way to strengthen other parts of the system. What is needed most at the national level are better linkages between public and private sectors, and between geographical regions, to ensure the maximum benefit for users of the system. In particular, the system requires:

- objectives that are understood by all;
- standards and measures of performance (Each course and each institution should define what young people or adults are supposed to learn, and have means of assessing whether they have learned it);
- counselling and mentoring (As the learning system grows in scope and complexity, the need will grow for educational brokers — counsellors and coordinators who do

not train people directly but who help the learner through the various steps in the learning process and into jobs);
- better data (There are lots of data about the formal learning institutions, but not nearly enough information about individual learners — for example, who is learning what or even the number of people involved in formal learning, whether at school, home or work);
- better information about opportunities and trends so that better informed decisions can be made; and
- partnerships (New modes of cooperation must be developed to link the various components of the learning system into a cohesive whole. Many networks and associations already represent separate components of the system, but there are few organizations devoted to building ridges between different parts of the system.)

Funding issues are obviously important as well. We need to examine the value received for funds invested in learning. Overall, public investments in education in Canada are high. Canadian taxpayers are among the most generous in the world in supporting elementary and secondary education. However, Canada's record in employer investment in training is among the worst in the industrialized world. We rank only midway in investing in higher education and are weak on other methods of school-to-work transition like apprenticeship.

The Role of the Federal Government

The provinces have constitutional responsibility and provide the bulk of financial support for education. The federal government has for many years supported higher education through transfers to the provinces and research grants to universities. It has also promoted industrial training through various programs and provides support for training for the unemployed and those at risk in the labour market. In total, Ottawa invests about $11 billion annually in the learning system.

Among the federal government's recent initiatives in this area are a national Stay-in-School Initiative; various programs to promote literacy; Canada Scholarships, which have helped thousands of students pursue studies in math, sciences and engineering; and the Canadian Labour Force Development Strategy, which calls for an $800-million shift within the Unemployment Insurance Program from passive income support to active support for skills training.

If, as this paper envisions, targets and priorities for our learning system become the subject of a national dialogue, and as discussions on the constitutional proposals proceed, the federal government's role will be part of the discussion, including how the federal government should help finance learning by young adults, whether in colleges and universities, or through apprenticeships or other means. The first step, however, will be to agree on what we want to achieve together over the next decade.

The Next Steps

The federal government is committed to initiating discussions that could result in a common vision shared among the many other partners involved in the learning system.

The next steps in the process, therefore, should be to:
- build public awareness of the key issues leading to a consensus on changes to our approaches to learning; and
- consult widely on the priorities and targets that should guide the actions of the federal government and all its partners in the learning system.

The outcome should be a commitment by all stakeholders — governments, employers, workers, parents, students and educators — to a concerted plan of action.

The federal government, with its Stay-in-School campaign and other public awareness

initiatives, is already taking some steps to build awareness. Further efforts at building public awareness will be made as the consultation process proceeds.

It is not the purpose of this paper to prescribe in advance the parameters of discussion. But it may be possible to agree on certain broad priorities. All partners in the learning system might agree, for instance, on the importance of:

- equipping all Canadians with the basic skills necessary for lifelong learning; and
- involving many more Canadians in acquiring advanced and specialized skills, especially those relating to applied science and technology.

A major purpose of the coming consultations will be to see if such general priorities, and others identified in the last section of this discussion paper, can be translated into specific targets. Some specific 10-year goals are proposed in the final section as a basis for discussion. They include:

- cutting adult illiteracy rates in half;
- having 90 percent of Canadians earn a high-school diploma or equivalent by age 25;
- quadrupling the amount of learning that employers provide to students through structured work experience and quadrupling the amount of training employers provide to their regular employees;
- doubling the number of community-college graduates and university postgraduates in science, engineering and technology, and becoming a world leader in math and science achievement at all levels of the school systems; and
- having a system of lifelong learning that is among the world's best at setting standards of performance and assessing achievement.

These, and the other 10-year targets identified in the final section, are not meant as a definitive list. Rather, they are intended to help the discussion process — if a consensus emerges that specific learning targets would help partners work in harmony over the coming decade.

The important thing is to start building that consensus. It is a challenge that should transcend partisan politics and jurisdictional sensitivities. The stakes are nothing less than Canada's continued prosperity and the individual well-being of its citizens.

WHY CONSULTATIONS NOW

THE PRIMARY AIM OF THIS PAPER IS TO INITIATE A CONSENSUS-building discussion to arrive at common targets and priorities for learning in Canada. If we wish to maintain our prosperity, we must build on our past performance in education and invest as effectively as possible in the development of our people. A highly qualified work force is essential to ensure that all Canadians have better employment opportunities, more employment security and higher wages.

Action is urgently required: the demand for educated, skilled and innovative personnel is accelerating in all sectors worldwide as national economies upgrade their technological base. Increasingly, countries will be competing with each other on the basis of the skills of their labour forces. At the same time, our educational systems are facing major challenges in areas such as high-school drop-out rates, literacy and numeracy skills, and vocational training.

The provinces have constitutional jurisdiction over all levels of education in Canada and, therefore, have a primary role to play in ensuring the relevance of our educational systems. All provinces are aware of the dimension of the challenge and many have launched initiatives to address these issues. They are also working together through the Council of Ministers of Education to develop educational achievement measures, and through the Council of Science and Technology Ministers to develop human resources and promote a science culture.

The federal government accepts fully the jurisdiction of the provinces in the field of education as this reflects the diversity of Canada and the close connection of education to historical and cultural reality. Furthermore, the government proposes that this exclusive jurisdiction should be extended to include training. At the same time, the government believes it has a role to play in promoting excellence and supporting provincial efforts to improve the acquisition of knowledge and skills.

In launching this initiative, it is seeking only to focus public attention on a field of fundamental importance in which major challenges must be met if Canada is to remain a prosperous and competitive country. The federal government has no education agenda of its own; its objectives are limited to setting in train a process which, hopefully, will lead to the emergence of a public consensus about some future courses of action. The federal government wants to be a catalyst in starting a dialogue among all stakeholders on the challenges facing our economy and learning systems. It hopes that this dialogue will lead to a consensus that could provide valuable guidance to governments in deciding upon policies and programs in the 1990s.

If we are to meet the demands of a technology-driven economy, and provide good employment opportunities for Canadians, we must upgrade our educational systems in terms of quality, relevance and responsiveness. Governments, educational institutions, industry, labour and parents must act together to ensure that our educational systems are providing students with the skills they will need to obtain good jobs and earn a decent living. We need to explore how we can strengthen cooperative efforts, not only to ease the transition from school to work, but also to encourage young people to stay in school to complete their studies.

The development and coordination of new networks and partnerships is critical if we are to forge an effective lifelong learning system that ensures Canadians can acquire and maintain relevant skills and knowledge in this fast-changing world. The new Canadian Labour Force Development Board is an excellent model of the type of partnerships required. It brings together business, labour, social action groups and training providers and will play a major role in forging a consensus on training issues, particularly between business and labour, leading to more workplace training.

Subjects to be addressed during the public consultations might include:

- ways of promoting a learning culture, and the institutionalization of lifelong learning;
- the links between high skills, good jobs, a strong economy and a prosperous society;
- how best to bridge the gap between education and the world of work;
- adjustments to new high-wage jobs rather than the preservation of existing low-wage ones;
- investments in the skills of those without the opportunity to learn and work to their full potential; and
- ways of assessing Canadian education/training systems in relation to those of our international competitors.

In August 1989, the Prime Minister indicated the need for a comprehensive review of the way in which we help Canadian citizens acquire skills and knowledge. He called for a "collective study of our education system, its relationship to Canadian competitiveness and its relevance to the international challenges of the year 2000." In November 1989, the premiers responded positively with an agreement to set up a task force to review human resource development in Canada, including schools and preschools, colleges and universities, school-to-work transitions such as apprenticeships, and the many forms of adult learning.

In view of these earlier developments this discussion paper is being issued in order to:

- increase awareness of the learning challenge before us; and
- begin a process of consultation on Canadian priorities and targets for learning that should guide the actions of governments and other learning partners over the next decade.

In the economy of the future, prosperity will be created, not inherited. Educators will play a major role in meeting the challenge, as they have in the past. Governments must provide important support but, fundamentally, the challenge can be addressed only through changed attitudes, expectations and actions of employers and workers, parents, and students. Canadians must all learn to be more serious about learning. Canadians must collectively move beyond identifying shared priorities to determine common learning objectives and principles that will guide cooperative action over the next decade.

THE CHALLENGE:

KEEPING PACE WITH CHANGE

Our learning system has served Canada well in the past. We have made significant progress over the past quarter century. But the needs of Canadians will be different in the future. Our learning system is good — but not good enough.

Part I of this discussion paper summarizes the learning challenge facing our aging population in a rapidly changing economy and the gaps we must bridge if we are to provide relevant skills for all Canadians.

THE CHALLENGE: KEEPING PACE WITH CHANGE

OUR LEARNING SYSTEM HAS SERVED CANADA WELL IN THE PAST. We have made significant progress over the past quarter century. But the needs of the future will be different. Studies are now painting a picture of future skill needs that simply cannot be met by our existing learning system.

"...globalization of the world economy has progressed to the point where many domestic policies are having to be realigned so as to better ensure the competitiveness of Canadian businesses. Since the quality of the labour force is so vital to Canada's productivity performance and overall growth prospects, a reassessment of our education and training programs is essential."

David Husband
"Globalization and the Implications for Education and Training"
Éducation et formation à l'heure de la compétitivité internationale
Jac-André Boulet et al., editors
Association des économistes québécois, 1990

"...the accelerating pace of technological change is rendering existing knowledge and skills obsolete with quickening speed. This puts a premium on developing a flexible labour force with excellent generic skills."

Thomas d'Aquino
Business Council on National Issues remarks to the Financial Post Conference, "Building a Competitive Work Force," 1990

Part I of this discussion paper describes the challenges posed by a changing economy and society, and the gaps we must bridge if Canadians are to achieve their individual and collective potential in the economy of the future.

Definition of skills and learning. In this paper the word *skills* and the term *skills and knowledge* are used as a kind of shorthand to include all the results of learning — skills, knowledge, attitudes and abilities. The term *learning system* means the formal ways that learning is provided — schools, colleges, apprenticeship, employee training in firms, universities, and other means.

Sources of the Learning Challenge

The Economy is Changing

During the past decade, citizens of all industrialized countries have witnessed rapid and constant change in the character of domestic and international economies, and indeed, in the nature of work available in these economies. This transformation has been fuelled in large part by the rapid proliferation of new technologies, particularly microelectronic and telecommunications technologies, in all sectors of the economy. Automated machines have replaced much manual labour in the production of primary products and the assembly of manufactured goods. These technologies have eliminated many routine tasks, as well as some hazardous ones. As well, they have increased the level of skills required by workers who use them. Experience has shown that these *intelligent* machines work best when paired with knowledgeable, motivated and skilled workers.

We have also witnessed the invention of artificial materials that can fill needs previously met by natural resources. This has meant that Canada can rely less on one of its traditional strengths — its richness in natural resources — as a source of future prosperity. At the same time, technological developments have facilitated the creation of strong world markets. There has been rapid growth in world trade in goods, services and in international financial arrangements.

In this new world, countries with advanced economies like ours have shifted toward the production of high-quality, specialized goods and services. This is not only true of high-technology, leading-edge industries, but also of more mature industries such as automobile and machinery, and of the service sector. In fact, the fastest growth has been in the service sector. It now accounts for some 71 percent of all employment in Canada, and business services involving highly skilled and highly paid jobs — like engineering, legal services and management consulting — has been the fastest growing component of the service sector.

Taken together, these trends constitute a fundamental change in the nature of the way we do business and create wealth. In the past, nations could prosper by processing and selling *inherited* natural resources. Today's successful economies create value by applying knowledge to goods and services

or by inventing better ways of performing old tasks.

Economic Change is Accelerating

Canadians are well aware that technological advance is changing the nature of our economy. The pace of this change is also accelerating. Again, the message is clear. Skills and knowledge learned now and in the future will become obsolete more rapidly, creating the need for a regular renewal of skills.

The Work Force is Aging

Canada has always had a very dynamic labour market, with a constant flow of people moving in and out of the work force and from one job to another. This natural ability of the Canadian work force to adapt to change will be affected by demographic shifts in the years ahead, particularly the middle aging of the large baby-boom generation.

The lower birth rate in the 1970s compared to the baby-boom years of earlier decades, means Canada's labour force will grow more slowly throughout the 1990s. With fewer young people, older Canadians will constitute an increasing proportion of the working population. Whereas 49 percent of the labour force was over the age of 34 in 1986, by 2000 almost 60 percent will be older than 34.

The practical message is that we cannot count on young people coming out of school to meet new skill needs. New skill requirements will increasingly have to be met through retraining of the existing work force. Most of the people who will need new skills in the year 2000 have already left school.

Implications

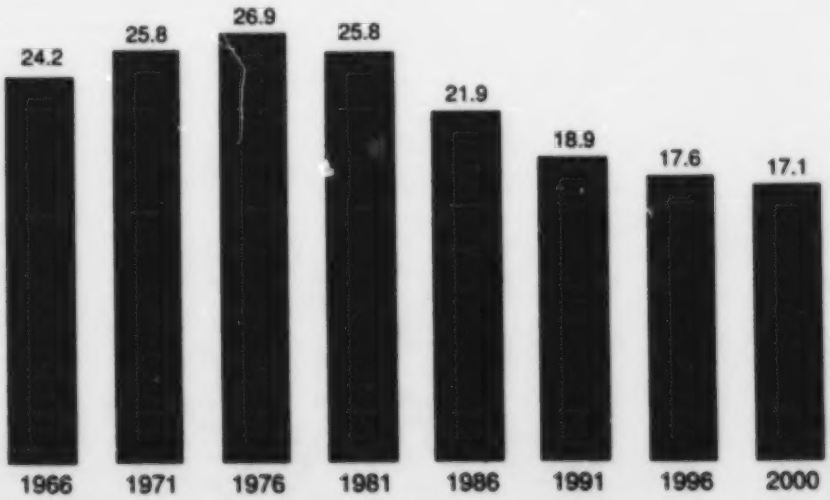
Taken together, these changes will have the following implications for Canadian workers:

- The skill and knowledge requirements of most jobs in the economy will rise in the future. Fewer jobs will be available for the unskilled and uneducated, and new workers will require a higher level of skills as they enter the work force.
- Individuals will be required to master more skills and to use these skills more frequently. This will require all workers to have a sound base of *learning-to-learn* skills.

"Even while we confront jobless rates of nearly 8 percent, the job vacancy rate — jobs that cannot be filled because no one can be found with the right qualifications — is the highest in nearly 20 years. There are 600 000 job vacancies in an economy with almost one million unemployed."

Janice Moyer
President
Information Technology
Association of Canada
speaking in Toronto
Globe and Mail
February 20, 1991

Youth Share of the Labour Force, 1966–2000



Source: Statistics Canada, *Historical Labour Force Statistics*, (1988) and Employment and Immigration Canada, 1989

"...the relationship between education and training and industrial competitiveness is a vital one. It is changing in nature in the face of the pace of technological change and associated global competition. IRDAC is convinced that the education and training issues related to industrial competence and competitiveness have an overriding importance in relation to the future well-being of Europe and its citizens."

Industrial Research and Development Advisory Committee (IRDAC) of the Commission of the European Community
COMETT Bulletin
February 1991

"Two major tendencies characterize the development of education and training systems: the first is the increasing involvement of enterprises in the skill formation of both young people and adults; the second is the gradual redistribution of organized learning opportunities in favour of adults, not only for demographic reasons, but also because more adults, and increasingly older adults, participate in formal and informal education, training and skill formation at work and in educational institutions."

Organization for Economic Cooperation and Development
Education and the Economy in a Changing Society, 1989

- Individuals can no longer expect to acquire one set of skills that will carry them throughout their working lives. Frequent retraining will be needed to ensure existing members of the work force keep up with technical developments.

Changing Occupational Skill Requirements

Skill Level/ Years of training	*1986 Labour Force*	*1989 – 2000 New Jobs*
More than 16 years	23.0%	40.0%
13 to 16 years	21.6%	17.4%
12 years	8.7%	5.5%
Less than 12 years	46.7%	37.1%

Source: Employment and Immigration Canada, 1990

Learning: the Key to Prosperity, Competitiveness, Good Jobs and a Good Quality of Life

Demographics, the accelerating pace of technological change and a changing world economy are the factors that have caused most industrial nations to look seriously at their learning systems. But the goals and objectives of learning are much broader than just a high standard of living. They include a good quality of life, an equitable society and the goal of learning as a valued end in itself.

Good jobs, with high skills and high pay, provide the central link. An internationally competitive economy needs highly skilled workers and high-skill work is the basis for high pay and job fulfilment. These in turn are prerequisites for prosperity and a good quality of life. A society that stresses high-skill jobs for all will minimize the social inequities that can occur when there are large numbers of jobs that pay poorly. In today's global economy, a society that invests in the development of its citizens will attract the type of industrial activity that will sustain a high standard of living and ensure the prosperity of future generations. This is as true for the less industrialized regions of the country as it is for Quebec and Ontario.

The new jobs will be more interesting and challenging. In a world where diverse strands of knowledge are increasingly being combined in the production of products or services, multi-disciplinary approaches to problem solving and innovation will be essential.

It is also important to remember that, while competitiveness may be the force that is driving the pace of international reforms of learning systems, all forms of learning — whether directed to social, environmental, economic, cultural or intellectual goals — will benefit from those reforms.

This can be seen in the last major wave of learning reform in Canada, the huge expansion of the post-secondary system in the 1960s. The urgency behind those reforms was also rooted in demographics and competitiveness. The baby boom was about to burst on the post-secondary system at a time when many experts saw the need for far more post-secondary graduates — in order to be competitive in the coming space age. But, the greatly expanded learning system that resulted did not concentrate on technology and the hard sciences alone. There was a great growth in learning in the arts, humanities and social sciences as well. Secondary school curricula were democratized, some feel perhaps at the expense of traditional standards.

The parallel to the reforms of the 1960s does not, however, extend to solutions. The main solution then was heavy government spending to build the classrooms and hire the teachers to meet the oncoming baby boom. We are now faced with the very different problem of fewer young people and more adults in need of learning. A main problem today is the low level of training taking place among adult workers. Similarly, to improve standards and quality of education, it is not possible to return to pre-1960s solutions like tough exams and streaming of students. Another major problem today is with people who enter the

work force without basic skills and without post-secondary education. Tough exams and the like would only make the drop-out situation worse.

Taking Stock

How well prepared are Canadians to find the new solutions, to meet the challenges that lie ahead? The short answer is that we have collectively made significant progress during the past quarter century, but we still have a long way to go. The collective statistics mask the fact that the system has left a large minority unprepared for the challenges that lie ahead. The facts and figures below show that our learning system is good — but simply not good enough.

With each generation, Canada is becoming a more literate and better educated society...

- In 1951, less than half of Canadian adults had a grade nine education. In 1986, four of five adults had at least a grade nine education and almost half (45 percent) the adult population were secondary school graduates.
- More than 100 000 new university graduates are being added each year to the 1986 stock of 1.9 million graduates.

However, many are still left out...

- Three of 10 students (100 000 a year) still drop out before finishing high school, creating a growing group that is often functionally illiterate, largely untrainable and increasingly unemployable.
- Four of 10 adults (38 percent) have some difficulty with everyday reading and math demands.

Furthermore, the current educational attainment of the work force is far below levels that will be required in the future...

- Of all the jobs forecast to be created between 1989 and 2000, nearly two thirds (62.9 percent) will require at least 12 years of education and training; 40 percent will require more than 16 years of training. Yet, in 1986, nearly half (46.7 percent) of all workers beyond school age possessed less than secondary school education.

Participation in the formal learning system is high...

- Canada and the U.S. have the highest participation rates in the world in post-secondary education.
- Approximately one million Canadians are currently registered full-time in public trade schools, colleges and universities.
- More than three million Canadians register in adult education courses each year.
- Close to one in four Canadians intends to start an educational program within the next five years.
- Canadian women are making significant advances. The number of women completing trade and vocational programs is increasing and more women than men in the younger age group are obtaining university degrees.

However, the results are less impressive...

- Canadian secondary students were outscored by their counterparts in most industrial countries in international science tests, despite better scores at the primary level.
- Too many first year university students have to take remedial math and literacy courses to enable them to profit from university education.

Furthermore, our scientific and technical performance is worrisome...

- Enrolments in trade and vocational programs have been declining.
- While nearly everyone has taken math in high school, less than 60 percent has taken physics or chemistry.

- The popularity of these high-school and university science courses has been declining.

Our educational investments are large...

- Currently, Canadians are investing some $50 billion annually in our learning system — some $45 billion in formal education and $5 billion in adult training.
- Using the measure of *effort in education* (i.e. the ratio of the amount spent per student compared to the average per capita wealth of the population), only Japan puts a greater fiscal effort into formal education.
- Our investments in elementary and secondary schooling ranks especially high. At the post-secondary level, investments are also high in absolute terms, and rank in the middle of the pack in terms of effort in education.

However, training investments by employers have been low...

- A 1987 survey indicates that only one third of employers provide formal training for employees, ranging from 27 percent of very small firms to 92 percent of large companies (1 000-plus employees). Further, nearly one half of Canadian investments are made by the very large companies, who employ approximately one quarter of the work force.
- Private industry spends 0.3 percent of our gross domestic product on training. The roughly comparable figure in the U.S. is over twice that. Australians invest three times more than us; the Japanese, over five times more; and Germans, nearly eight times more.

Effort, in terms of time spent on learning, is low

- Compared with other countries, students spend little time in learning. A standard school year here is about 180 to 185 days long, compared to up to 240 in Germany and 243 in Japan. Many young people spend more time watching TV and doing unrelated part-time work than they spend in classes. The average public school student watches 1 040 hours of television a year, but receives only about 900 hours of formal instruction.
- There is little formal learning for young people who do not go on to post-secondary education, a stark contrast to the kinds of apprenticeship found in some European countries.
- Available evidence suggests that Canadian workers spend only about half the time in on-the-job learning as do their American counterparts, and only a small fraction of the time spent by their counterparts in Sweden and Japan.

Furthermore, financing techniques and burden sharing vary widely...

- Pre-school learning is financed by parents and governments (through subsidized day-care and tax deductions).
- Primary and secondary education is taxpayer-financed, mainly using the municipal tax base, provincial resources and, indirectly, federal equalization transfers to the provinces.
- Post-secondary education, whether full or part time, is funded largely by taxpayers through government support to colleges and universities. Tuition fees paid by students, sometimes with the help of parents or with loans, cover only a small part of the cost of higher education. Students pay their living costs by a combination of work, parental support and government aid (of course they forego earnings during this period).
- School-to-work transitions, such as apprenticeships, are borne by the student (through reduced wages), the sponsoring employer, and unemployment insurance (financed by employers and employees). In contrast to formal post-secondary

education, the government/parental share is relatively small.

- Adult training is financed, depending on the type of training, by governments (through direct spending and tax deductions), by employee and employer contributions to unemployment insurance, by employers, and by individuals (for further education initiated by them).

Part II of this paper examines how other countries are meeting this challenge. Part III sets out a Canadian perspective.

The message is clear.

To maintain high-skill jobs, a competitive economy, economic prosperity and a high quality of life, we must:

- improve greatly the general level of skills for all Canadians; and
- ensure a much higher level of advanced skills for far more Canadians.

THE OPPORTUNITIES:

LEARNING FROM OTHERS

The learning challenges facing Canada during the 1990s are far from unique. All nations face similar challenges. Many industrialized nations are well advanced in devising and implementing education and training strategies.

Part II describes some of the common processes and principles followed in various foreign strategies that may be helpful in devising a Canadian approach.

THE OPPORTUNITIES: LEARNING FROM OTHERS

CANADA IS FAR FROM ALONE IN FACING A MAJOR LEARNING challenge during the 1990s. Many other industrial nations, including other federal systems such as ours, are well advanced in devising and implementing national education and training strategies. International bodies like the Organization for Economic Cooperation and Development (OECD) are engaged in studies and coordination activities. The European Community is well advanced in helping shape the evolution of education and training in member countries.

Reform Processes

The review and reform process undertaken in other nations has been characterized by two stages. Stage I, usually of two-to-three-year duration, entails a planned process of public policy review and discussion with the general public and stakeholders, like teacher groups and industry, to build consensus on what is needed and why. Stage II involves a wide variety of implementation strategies.

This discussion paper is a contribution by the federal government to a Stage I consultation process in Canada.

Recurrent Themes

The content and trends of reform in other nations have been remarkably similar, at least in broad terms. Predictably, specific initiatives undertaken within the broad themes vary greatly, reflecting the different cultures, traditions and political systems of individual nations. Common themes include:

Committing to National Goals and Objectives

Without exception, clear statements of national goals and objectives, sometimes accompanied by appropriate targets, are found.

An American Education Summit culminated in the agreement of the President and the National Governors' Association regarding six national goals and 21 related objectives for the year 2000. France legislated mission and objective statements. The Japanese Provisional Council on Educational Reform made recommendations on eight major issue areas. Germany incorporated educational rights in its federal Basic Law. Australia developed the Hobart Declaration as a statement of its national goals for schooling. New Zealand issued government policy statements regarding preschool education, school reform, and post-school education and training.

Adopting Lifelong Learning

Nations are increasingly viewing the learning system as encompassing preschool opportunities, formal schooling, as well as ongoing education and training during working years.

New Zealand studied every level from preschool to university as part of a lifetime education system. Japan created a Bureau of Lifelong Education to promote reforms. The U.S. will ensure by the year 2000 that every child starts school ready to learn and that every American adult is a literate worker and citizen. France announced that the right to a basic education commences at the age of three. Infants of two have a right to education if they live in a disadvantaged area. Sweden developed legislation for paid educational leave and local economic renewal funds that promote recurrent education within a lifelong education system.

Linking Basic Skills to International Competitiveness

Every nation is gearing up for international competition. They are all improving the basic and functional education skills of their citizens and aiming to develop and maintain world-class work forces with advanced workplace skills. Every country is taking steps to strengthen instruction in mathematics, science and foreign languages as well as to enhance its research and development capacity.

Japan's Council on Education Reform identified improved basic education and science instruction, as well as upgrading of university research, as essential reforms. The U.S. established the national goals of being first in the world in mathematics and science achievement by the year 2000 and increasing its high-school graduation rate to no less than 90 percent by the year 2000. Australia created mechanisms to reallocate research funds to areas of national priority. The U.K. created a National Council for Vocational Qualifications to reform vocational qualifications and instituted a pilot project to provide training vouchers for 16 to 18 year olds. France aims to diminish by half the number of youths who leave the education system without appropriate qualifications.

Aiming for Excellence and Effectiveness in the Systems

Most of the nations have initiated national curriculum guidelines, national assessment processes and national certification systems. All have focussed on the necessity of strengthening both initial and continuing teacher training.

Sweden developed an evaluation strategy for its school and adult education systems. The U.K. developed the National Curriculum and associated assessments. Australia created a national curriculum map and the Curriculum Corporation of Australia to promote collaborative development across the nation. Japan proposed teacher training reforms. The U.S. committed itself to assessing the performances of students "in critical subjects in grades four, eight and twelve." New Zealand established national guidelines for early childhood care and education to provide minimum standards of quality.

Developing Closer Links Between Education and the Private Sector

In most nations the private sector plays an important role in providing learning opportunities related to workplace skills. Almost every nation is promoting increased private sector training both on and off the job as well as increased school-to-work transition mechanisms.

Australia is encouraging greater private sector training through a tax on non-trainers. France has a system of paid educational leave and is promoting greater school-enterprise links. Sweden reformed its high-school vocational program to enable more work experience. Germany continues to enhance its already strong dual system of vocational training, which includes school-enterprise links and paid educational leave in seven states. Japan continues to emphasize its private sector on-the-job training, and has increased its public sector skill testing and certification functions.

Promoting Social Equity by Addressing Needs of Special Groups

Most nations are actively seeking the increased participation of special needs groups including women, natives, the disabled and visible minorities. All countries have strengthened cultural and citizenship education, including that for immigrants.

New Zealand adopted Maori rights as part of the National Guidelines for education. Australia is paying special attention to increased participation of aboriginal groups, women and ethnic minorities. France is strengthening the preschool sector, particularly in disadvantaged areas. Sweden is giving priority to the undereducated. The U.S. will increase the number of college and graduate students in mathematics, science and engineering (especially women and minorities).

Encouraging Efficiency in the Total System

Many nations have chosen to use the resources of the total education and training system, including the non-formal component (private, voluntary and cooperative sectors). All countries are making increased use of information technologies and promoting new approaches to delivery, including open learning and distance education.

The U.K. initiated a five-year program to integrate the use of information technology in the schools. Sweden is systematically promoting collaboration between the formal and non-formal (private, voluntary and cooperative) sectors. Australia amalgamated many of its distance-education centres as well as its smaller higher education institutions. The U.S. is creating a network of model schools.

Implications for Canada

A review of experience in other nations provides a context in which to consider Canada's needs and options for education and training. Because of our highly decentralized approach to education, we appear to other countries to have an uncoordinated collection of policies and practices without explicit national priorities or targets. Yet, many strengths of Canadian practice are also recognized internationally, including our work in distance education, the high level of accessibility to post-secondary education and our development of cooperative education. The test for Canada will be our ability to build on existing strengths, learn from others, and develop a clear sense of direction. Only in this way will Canada be able to face the learning challenge of the future.

A number of countries have been engaged in systematic reform for some years and have already had the opportunity to look back and assess their experiences. Their lessons can be of particular value to us. Perhaps the main theme is that the world-wide changes of the 1980s did not pay enough attention to what was happening outside the classroom — to the role of parents in learning, to ways of providing learning through mixes of classroom and work experience, to learning through changing the content of jobs as well as by formal learning, and generally to effective ways of learning throughout life.

MEETING THE CHALLENGE:

A CANADIAN SOLUTION

There is a growing consensus in Canada that our success in providing relevant skills for all Canadians will depend on creating a learning culture at home and at work and building a system that offers Canadians lifelong learning opportunities.

Part III discusses how we can build on our current strengths to achieve a Canadian solution.

MEETING THE CHALLENGE: A CANADIAN SOLUTION

PART I OF THIS PAPER SUMMARIZES THE LEARNING CHALLENGE facing Canadians. The message is clear: we must provide more relevant skills at all levels of the skill continuum. Part II describes how other nations have been systematically reforming their own learning systems. Part III puts forward for discussion potential Canadian solutions for achieving the goal of relevant skills for all. These solutions are drawn from many studies and reports, some of which are listed at the end of the paper, that demonstrate a strong emerging consensus in Canada on many of the ways of achieving our goal. There is a consensus that the principle of lifelong learning is a key part of the solution, and that we must work harder at developing a learning culture both at home and at work.

> The Canadian consensus is to build a stronger learning culture. Only then can a system of lifelong learning that provides relevant skills to all be established.

Relevant Skills for All

Worldwide reforms in education and training of the 1960s and 1970s were about growth and accessibility; those of the 1980s were about quality and excellence. There appears to be worldwide agreement that the 1990s reforms must be about the pursuit of both.

An ideal learning system would strive to achieve **relevant skills for all.** In practice, this means:

- much higher levels of basic skills for all Canadians, skills that prepare people for a lifetime of learning; and
- higher levels of advanced and specialized skills for far more Canadians, both young people and adults; including the ability to apply mathematical, scientific and design principles to practical problems, and the opportunity to renew these skills regularly.

Basic Skills for a Lifetime of Learning

Despite large investments in education, recent Canadian numeracy and literacy statistics paint a grim picture of a future work force without the basic skills to adjust quickly to a rapidly changing environment. The prospects are particularly ominous for the one million young people who may drop out of high school during the 1990s.

There is considerable agreement about what constitutes the basic skills needed for a lifetime of learning.

Employers have identified the following basic skills that they want in the workplace:

- the ability to learn, the most basic skill of all;
- reading, writing and computation skills;
- oral communication and listening skills;
- problem solving and creative thinking;
- skills and values needed to achieve high self-esteem, motivation and goal setting;
- employability and career development skills;
- interpersonal, teamwork and negotiation skills; and
- skills related to understanding organizational culture and the sharing of leadership.

Opinion surveys show that parents also recognize these are the key basic skills. However, many in the general public feel that the current system is already reasonably responsive in providing the basics. Learning directed to moral development and cultural values is also supported widely by parents and the public.

Advanced and Specialized Skills

Providing these basic skills to all Canadians is critically important. However, it is only a starting point in a future learning system that stresses relevant skills for all. Canadians should be able, throughout their lifetime, to learn new skills continually and absorb new knowledge. Many more Canadians should be able to perform at much higher skill levels, particularly in those areas that will create the most value and wealth in the global economy. This means skills to:

- apply mathematical and scientific principles in a work setting;
- adapt to, and operate comfortably in, a rapidly changing technological environment;
- operate effectively in team environments, often with people of different social and cultural backgrounds;
- work effectively in the other official language and in the languages of competitor nations (and to be sensitive to the history and culture of other countries, and other parts of Canada); and
- be entrepreneurial and innovative in many areas — not only in design and R&D, but in the management of people and information.

What does it mean to have *far more* Canadians with advanced and specialized skills? There does not appear to be a consensus about numbers, but it would certainly mean:

- significantly more students in the natural sciences and engineering in universities, and in technology courses in community colleges and CEGEPs;
- a major expansion in the number of people with advanced technical skills obtained in practical work settings;
- women and minority groups being represented fully in both areas above; and
- better bridges between school and the workplace.

Developing a Learning Culture

Past discussions in Canada about educational and training policies have often focussed on funding and curricula.

Good Schools are Important, but...

Obviously, good schools make a difference and the mechanics of formal education — such as standards, teacher qualifications, class size, curricula, the time devoted to learning and the quality of the university research capacity — are necessary preconditions for success. Hence the need to examine continually issues such as teacher training and the amount of classroom time.

While the mechanics of education are important, research also suggests the impact that schools have on student achievement is related mainly to the quality of the learning environment — factors like clear goals, high expectations, student and teacher pride, and professionalism. What really makes a difference is a strong **learning culture in the schools in the home and at work.** But studies have shown that a vital learning culture in the classroom needs to be built on broader social values. There is a need to develop a consensus on the goals and objectives of our learning systems — and to then work together to achieve these goals.

Successful Reform Must Begin at Home and Work

Numerous studies conclude that the main determinants of successful learning can be found in individual abilities and attitudes, as fostered by the values and expectations found in the home and work environment. Simply put, individuals raised in families that value learning and set high expectations have better chances of success, as

"These changes outline a human resource challenge that, left unattended, will cause Canadian companies to run out of competent workers. They call for a new and different kind of thinking by companies toward their people, toward hiring of minorities, toward the promotion of women, and toward the human worth of the individual....Cultural change is required from the top to the bottom of organizations to empower people to do their jobs as well as they can. If we handicap workers with rigid functional structures and procedure manuals, we cannot expect them to give their best."

Gary Donahee
Vice-President, Human Resources, Northern Telecom speaking in Toronto December 1990

"Current and anticipated skills shortages are such a threat to Europe's competitiveness that immediate action is required from all parties concerned. [These include]...

- *authorities and administrations at community, national, regional and local level*
- *enterprises, whatever their size or sector*
- *the education sector, in particular the higher education and continuing training sector*
- *the individual themselves*

Only an overall and sustained approach by all these actors will lead to adequate responses....It will require a change in attitudes by all...[which will involve]...

- *raising the awareness in the general population and with the actors concerned."*

Industrial Research and Development Advisory Committee (IRDAC) of the Commission of the European Communities
COMETT Bulletin
February 1991

do employees in a working environment that values learning.

The influence of family background is illustrated dramatically by the very different levels of educational success enjoyed by children of different cultural backgrounds — children from immigrant groups that value education highly usually fare well, whereas children raised in home environments that do not encourage learning usually fare poorly.

The influence of parents on their children's academic choices remains strong throughout childhood and adolescence. Participation in adult learning is, in turn, related strongly to a person's formal education base. Even volunteering, which often serves as an occasion for much work-related learning, is a function of years of schooling.

The strong influence of work on learning is obvious, especially in the case of employer-based training. Even more important, the way jobs are structured determines how much learning occurs on a day-to-day basis. The way jobs are rewarded sends strong signals about the real priorities for skills and learning.

Learning is respected in Canada, but one test of its real priority is the time and energy we devote to learning at school, at home and at work. Compared to countries in Europe and the Asia–Pacific, Canadians do not devote enough time to formal learning. At work, we spend far less time on training

Maximum Number of School Days in a Standard School Year

Japan	243
Germany	226-240
Hong Kong	195
England/Wales	192
France	185
Canada	**180-185**
United States	180

extracted from the Atlantic Monthly November 1990

workers than do our major competitors. In schools, the time devoted to core curricula appears to be shrinking as schools are asked to take on a variety of social roles previously performed within the family. Time spent watching television and in part-time work often exceeds time spent in school or doing homework.

There is potential for even larger problems in the future. Many children are entering school unprepared to learn. Today in large cities, a majority of students in a typical school class might have neither English nor French as a mother tongue and may face language barriers to learning. Up to a third might be from single-family homes whose source of income is social assistance. Many will come from home environments where it is difficult to give priority to learning.

Acceptance of second-class status in learning would be unthinkable to Canadians in all parts of the country. Yet the practical signs we give are often mixed. Studies suggest that Canadians may ask both too much and too little of learning institutions. International comparisons suggest we may be undemanding when it comes to the real business of learning. Opinion polls confirm that Canadian parents are generally satisfied with the educational status quo as it affects their own children. There is no public outcry about the fact our learning system produces as many drop-outs as it does university graduates, or that so many adults are functionally illiterate. There are relatively few demands for measures of how well schools are doing their job.

However, educators point out that many Canadians have high, and possibly unrealistic expectations, when it comes to other functions. Many Canadians demand that schools function like institutional parents — babysitting our kids in the younger years, all too often providing basic social and health services, and later on counselling young people on drugs and sex.

The message is clear: the attitudes and expectations of users — parents and students, and employers and workers — are crucial.

Despite this clear message, there remains disturbing evidence that many individual Canadians do not have the tools to develop a home and work environment where the pursuit of knowledge is encouraged and valued.

- Public opinion surveys indicate most Canadian parents do not understand that the changing world economy demands a new approach to learning.
- Judging from the low level of employer-based training in Canada, many employers do not appreciate fully the need to invest in their human resources, and have not yet tackled the major obstacles that make it difficult for small employers to train their employees.

Canadians understand the importance of learning in their own lives. Yet there is an impression of complacency in too many Canadian homes, offices and factories. What can be done about this? How can we develop a stronger learning culture adapted to a fast-changing world economy, an aging work force, and an industrial structure where small and medium-sized businesses, with limited training resources, account for the majority of employment?

A Learning Culture at Work

The main answer emerging around the world with respect to learning and the workplace is better human resource planning, better communications between businesses and learning institutions and, as at home, simply devoting more time and effort to learning. A human resource plan for the firm would cover all aspects of learning, from training to job rotation and restructuring. It would be linked to corporate productivity and competitiveness plans. The plans would set out long-term learning goals and measures of learning performances.

Employers and unions tell us that a stronger learning culture in the workplace will have a powerful influence throughout the whole learning system through such means as:

- the work experience sessions that are a normal part of schooling in the lifelong learning model;
- the pay scale offered, and the balance between high and low-skilled job openings. These send powerful messages to students and the learning institutions about the kind of skills that are really wanted;
- restructuring and enlarging the scope of jobs and decentralizing decision making in the interests of productivity (these create a more highly skilled work force and an emphasis on continual learning); and
- employers and unions helping learning institutions through school-to-work partnerships, membership in training boards, campaigns to reward excellence among students and teachers, lobbying for reform, and public awareness campaigns.

A Learning Culture at Home

At home, the development of a learning culture begins with increased awareness (i.e. more and better information).

More information. It is clear that parents and individual learners do not have enough information about the new requirements for skills and the important links between learning, good jobs and prosperity. Public communications programs designed to provide this information are therefore crucial. Another good way to build awareness is to identify and recognize excellence and achievement through contests, awards and scholarships for excellence and achievement in targeted areas. Many such programs exist, but more can be done. As well, some studies call for the learning equivalent of *ParticipAction*, a program that has helped transform Canadian attitudes toward physical fitness and well-being.

"The high priority given to training and education, especially in high-tech companies, derives from the notion that the whole staff have a continuous need for learning and that as many possible should take part in the process.... ...Japanese companies give extensive formal education and training and expect individual employees to invest some of their own time and energy in learning, although this is entirely voluntary."

International Labour Organization
Training and Retraining — Implications of Technological Change, 1987

"Information in readily usable form is required if the consumers of further education and training are to take full advantage of the opportunities available to them."

Organization for Economic Cooperation and Development
Further Education and Training of the Labour Force, 1990

"The usefulness of any policy dialogue on education and the future quality of Canada's workers will depend, however, on the availability of better empirical analysis. Hard and well-focused research is badly needed on how Canada's education systems can prepare a high-quality competitive work force, capable of adapting to a rapidly changing knowledge-based economy."

Economic Council of Canada
Good Jobs, Bad Jobs: Employment in the Service Economy, 1990

"In the increasingly global environment, the Council sees skill training not only as a necessity but also as a sound investment. It benefits both employers and employees. The Council believes that there are significant savings and benefits attached to a better prepared work force, which will make companies more productive and enhance the quality of working life."

Adjusting to Win: Report of the Advisory Council on Adjustment, 1989

"The dollars and 'sense' of investing in people is too important to rely upon big government, big business, or big unions to manage such investment. Centralized or 'corporate' solutions are not the answer. All employers and employees, in partnership with the education community and government, have to be at the forefront of the action."

Canadian Chamber of Commerce
Focus 2000: Report of the Task Force on Harnessing Change, 1989

"It is essential that equity considerations cut across all education and labour market policies — as well as private sector planning — so that all segments of the Canadian population are reached. Every individual worker must have maximum employment opportunities."

Adjusting to Win: Report of the Advisory Council on Adjustment, 1989

Better information. Increased public awareness must be based on objective data and sound analyses. Rhetoric alone will not suffice. The human resource plans of business and the decisions of Canadian students, workers and parents must be rooted in good data on the trends in skills and learning.

Recently, there have been encouraging developments with respect to the production of better hard data (e.g. the Statistics Canada literacy survey and the work related to achievement measures by the Council of Ministers of Education, Canada). However, existing efforts are not nearly enough. Today, we have enough information to start work on developing a learning culture at home and at work. But our understanding is not strong enough to sustain action over the long term. Virtually every study underlines the lack of basic data needed to help individuals and employers understand their long-term learning needs and the opportunities to meet those needs. Reliable data on long-term trends in the demand and supply of skills is needed if Canadians are to make informed decisions.

A Learning Culture and Investments in Learning

A learning culture means taking learning seriously. It means investing time and effort in learning, and recognizing its long-term importance for ourselves and our children.

We will have achieved a learning culture when we plan our learning activities as carefully as we plan our vacations, when we invest as much time in the upkeep of our skills as we do in the upkeep of our houses, when we pay as much attention to statistics about learning as we do to statistics about inflation or the stock market, or when we pay as much attention to quality and standards in learning as we do to the quality and standards of our food and appliances. A learning culture also means sensible financial investments in learning.

Investments in learning must be made in light of their long-term payoff to individuals, to companies and to society as a whole. Looking at spending on learning as an investment, rather than as an expenditure or a cost, changes the nature of some familiar discussions. It changes some of the questions we ask about learning.

For example, when looking at the amount of public funding going to education, the key question is shifted from "which sector is underfunded?" to "which sector is providing the most benefits for moneys invested?" In recent years there has been a great increase in interest around the world in measures that examine what is actually being learned, and in surveys of the satisfaction of graduates and employers with the education and training that was given.

As another example, in discussions about the sources of financing for education and training, there is increased interest not only in accessibility issues (who gets the education and training), but also in the proper balance between those who make the investments in education and training and those who benefit from investments.

As still another example, an investment perspective invites questions about the kind of activities in which we are investing. The schools have done a good job in handling many functions — health, social integration and moral development — that were once felt to be the responsibility of parents, churches and other organizations. But we should ask if this is a wise way of investing society's resources, does it interfere with the real business of the schools and are there alternative ways of dealing with these problems that would have a better payoff in the long run?

Studies indicate that a strong learning culture, with its long-term investment theme, also points to some new answers. It encourages new bridges to be built linking the economic, social and learning worlds.

A new approach to government programs for the jobless, shifting the emphasis from passive income support, like unemployment insurance or social assistance, toward investment in the training needed to find good jobs is an example of a bridge linking

economic and social policy. There is obvious long-term benefit to the individual if the training results in a good job, but there is also long-term benefit to employers and to our overall prosperity as the competitive economy of the future will need the full contribution of as many skilled workers as possible. Another example is a bridge that links child-care policy with preschool preparation. American business organizations, looking to their future sources of human resources, are calling increasingly for more investment in preschool and head-start programs.

A similar bridge makes it possible for economic and equity policies to meet. Many people are now held back from full participation in the labour market by systemic barriers related to gender, disability, culture or ethnic origin. Investment in removing these barriers, and in providing people in these groups with the right skills, can be both just and economically sound. We also try to help those who must adjust to a changing, more competitive marketplace.

Finally, a bridge would be created with education and training professionals who have always understood that the results of their efforts could be assessed properly only within a long-term framework.

Building the Structures for a System of Lifelong Learning

The goal of relevant skills for all can only be met in this world of constant change if our institutions adopt, and adapt to, the principle of lifelong learning.

Why Lifelong Learning?

- Efficient learning: Most of the basic and advanced skills needed for the workplace are learned best and most efficiently when structured work and classroom experience are judiciously mixed.
- Pace of change: The skills learned now and in the future will become obsolete at a more rapid pace than ever before; they must be renewed regularly. People affected by adjustment must be retrained, they must acquire skills for the future.
- Demographics dictate lifelong learning. The baby boom is over and so there will be fewer young people entering the labour force. Most of the people who need to be trained are already in the work force. The learning system must focus on them as well as on young people.
- Quality of life considerations support the shift to a model of lifelong learning. Many feel that a more even and integrated distribution of work, learning and leisure throughout life is a valued end in itself, one of the main benefits of successful participation in the global economy.

"The increasing pace of technological change means that today's workers may have to be trained for three or four different careers over the course of their working lives. In this context, the importance of lifelong education and training cannot be overstated. Education and training must no longer be perceived as a prerequisite for work, but as an integral part of the work process."

Canadian Labour Market and Productivity Centre
Report of the CLMPC *Task Forces*, 1990

Characteristics of a Lifelong Learning System

There is wide agreement on the ultimate features of a learning system based on a lifelong learning principle. Progress is already being made on many fronts and more features could, with effort and cooperation, be in place by the end of the decade. A fully developed system of lifelong learning would have the following characteristics:

- Children would enter school ready to learn. Child-care and preschool systems would provide compensatory experiences for children disadvantaged by family environment.
- Compulsory education to about age 16 would stress the skills needed for a lifetime of learning in a technologically sophisticated, globally interdependent society.
- From about the age of 16 until about the middle 20s, learning for most young people would consist of structured mixes of learning in classrooms, learning at home (including self-study and distance education through correspondence or TV) and work experience:
  - for those who stay on in schools, colleges and universities as their main activity, the work experience could be acquired through internship, or cooperative education, or other models

"Research has shown that providing early childhood programs to disadvantaged students is a good investment. The purpose of the program is to give the students a better start in first grade and to prevent them from falling behind their peers. No other program we looked at had the universal support of the Head Start programs."

Union Carbide Corporate Task Force on Education
Undereducated Uncompetitive U.S.A., 1989

"Companies must be willing to get involved in training apprentices and labour must recognize that apprentices are not cheap labour. From the start, of course, we must promote attitudinal changes, an environment of openness."

Yvon Boudreau
Secretary
Conférence permanente sur l'adaptation de la main-œuvre (CPAMO)
Le Devoir
January 25, 1991

"...the movement of young people out of the educational system and their integration into the labour market form a process that is becoming more prolonged, uncertain, and circuitous."

Harvey Krahn and Graham S. Lowe
The Economic Council of Canada
"Young Workers in the Service Economy"
Working Paper No. 14, 1990

"System-wide outcome standards are necessary as a basis for monitoring and improving educational quality in college programs. Standards across the system will ensure the equivalency of programs across the province."

Ontario Ministry of Colleges and Universities
Vision 2000: Quality and Opportunity, 1990

Education is "... a social currency that requires standardization."

Randall Litchfield
"Solving an Education Crisis"
Canadian Business
February 1991

that would provide structured practical learning (to replace much of the unrelated part-time and summer work that now takes place);
- for those who choose work as a main activity, the classroom experience would follow apprenticeship, new internship, or second-chance models that would provide more occupationally oriented learning, and would provide all young people with the equivalent of high school graduation.

Public policies would encourage young people to follow one of the above streams by such means as replacing unemployment insurance for those in this age group with student aid and training allowances.

- Beyond this transitional phase, adults would have regular opportunities to learn throughout their lives. Employer-based training would be routine; flexible work arrangements would encourage individually initiated training; and work experience in jobs would be structured increasingly so that learning takes place on a continuing basis. Adjustment assistance programs would be available for those whose existing skills are inadequate.
- Social and equity programs for employable individuals would increasingly emphasize the development of employment skills depending, of course, on the availability of jobs.

Supporting the Evolution of Lifelong Learning Structures

The lifelong learning model is not new. Many components are already in place. Efforts are under way by both the provinces and the federal government to strengthen components that are underdeveloped in Canada, including employer-based training and new approaches to school-to-work transition for young people who do not go on to post-secondary education. The Canadian Labour Force Development Board was established to promote and coordinate such activities.

Much work is under way (but more is needed) in the development of curricula, teacher training and teaching aids, and supporting materials suited to the lifelong learning model. With an emphasis on basic learning to learn skills, especially in the sciences and technology, we must develop learning materials that can be taught in modules and that can be tailored more easily to the individual needs of learners of all ages and backgrounds. We also need better research on what actually works best in terms of effective child and adult learning.

In the area of teaching and training, Canada is starting from a strong base. Compared with most other countries, our teachers and trainers are well qualified and supported by relatively large amounts of public funding. We have a history of excellence in many areas of classroom and distance education.

Less well developed, at least at the national level, are the elements that would allow the various components of the lifelong learning system to work in harmony. Coordination and linkages are needed to develop a user-oriented system, especially through:

- **standards and measures of results** that allow consistency and mobility;
- **counselling and mentoring arrangements** to guide learners through an increasingly complex learning system, and into jobs;
- **assessments** of the operation and achievements of the whole learning system and the interrelationships among its component modules; and
- the development of **partnerships** to link the parts of the system together.

Standards and measures of performance are the basic glue that will hold a new lifelong learning system together. Standards should reflect widely held views as to what the objectives and goals of our learning systems are. There should always be plans that define what the student is to learn and some means of assessing whether that learning has taken place. To the extent that these standards and measures are held in common, then learners will be able to move with comparative ease through different learning institutions at different stages of

their lives. Objective standards are needed for portability, mobility and consistency.

For example, standards and certificates will need to be developed for school-to-work transitions for those (over half of the population) that do not obtain college diplomas, university degrees or apprenticeship papers. This would allow learners to gain credit for their efforts and enable employers to gauge the capabilities of a potential worker.

Performance measures, although not of the same kind needed for certification, are also needed to allow users to compare learning institutions. In a fully developed lifelong learning system, users will have a number of learning alternatives — distance education via television, colleges, private trainers, etc. — and it will be important that they be able to make informed choices.

There is wide consensus on the need to develop better standards and performance measures. There is also wide appreciation of the difficulties involved and the need for great care. Learning is notoriously difficult to measure, and there are great risks of inserting false goals into the system through the use of bad measures.

Counselling and mentoring. Brokerage functions will need to be developed to help individual learners find their way through an increasingly complex system and to move between the worlds of learning and work. Many such advocacy, mentoring and counselling functions exist now, especially in areas like co-op education and training for marginal workers. More needs to be done, however, for all learners, from young children (whose main advocates should be knowledgeable parents) through to adult learners.

Early work with the brokerage function has been successful. In many employment programs for disadvantaged adults, for example, the key player is a coordinator, whose job is not to act as direct trainer, but to manage the whole series of steps needed to get a job. The coordinator acts as the broker between the client and the professional educators and counsellors.

Studies both of schools and adult learning are coming increasingly to an understanding of the central role of the knowledgeable broker or mentor in linking learning and work. It lies behind much of the recent interest in better school-business partnerships, the call for better support for career counsellors in schools and employment centres, and the new attention to human resource development in business.

Better information on the operation and achievement of the learning system. The lack of good data to support a learning culture among users has already been referred to. Statistics about the operation of the lifelong learning system itself are almost as weak. While the basic operations of the schools and post-secondary institutions are well documented, there is very little information from the perspective of the learner — such as information on how many people are participating in the whole learning system and how this is changing over time, or what is being learned and how effectively.

Substantial improvements in data will be needed if there is to be concerted progress in building a system of lifelong learning.

Partnerships. There is wide agreement that the development of new networks and partnerships must be a central element of a decade of achievement. Successful and effective action must be built on partnerships. For example, small businesses acting in isolation may not be able to articulate their long-term needs, but they can when acting as part of a local or sectoral association. Existing learning institutions, acting independently, would be hard pressed to build the interlinked structures of lifelong learning. Coordinating networks are essential.

"...through the advocacy functions of brokering one works through the systems negotiating for individual learners when necessary..."

The Workers' Educational Association of Canada
Unravelling the Tangle: Learning Information Services for Adults in Canada, 1990

"In developing initiatives related to learning in Canada, the Forum is aware that it is essential to begin by connecting with those immediately involved in education — teachers, administrators, elected officials, parents and students. There is an important process of information-sharing and trust-building on which effective planning must be based. And there must be a shared understanding that projects require visible commitment over time."

Corporate-Higher Education Forum
To Be Our Best: Learning for the Future, 1991

"Over the past few years, we have seen a number of path-breaking experiments in sectoral cooperation.... In each case, business and labour, usually with financial and logistical support from governments, have struck a bargain to cooperate on training and adjustment. The results are not perfect, but they are impressive."

Judith Maxwell
Economic Council of Canada
Au Courant, 1991

It is a question of expanding existing initiatives, rather than a fresh start. Many networks already operate within one component of the system (associations of teachers, trustees, adult educators, etc.). However, to date, only a few networks bridge more than one part of the system.

As noted, the new Canadian Labour Force Development Board is the most ambitious of the networks that are being developed. At the local level, there is renewed interest in business-school partnerships. But, generally, work is only beginning.

THE FEDERAL GOVERNMENT AS PARTNER

It is clear that our collective success in creating a learning culture and building a system of lifelong learning will require actions by individuals and institutions at all levels of Canadian society.

Part IV attempts to put the current role played by the federal government into perspective as a starting point in discussing its future place in an effective, national partnership.

THE FEDERAL GOVERNMENT AS PARTNER

EDUCATION IS A PROVINCIAL RESPONSIBILITY IN CANADA, WITH provincial governments and municipal authorities investing approximately $30 billion annually in education and training. However, the federal government has been a major partner in Canada's learning system, investing about $11 billion annually.

A summary of current federal involvement is found below, with questions on the appropriate federal role in the future.

Summary of Current Federal Support

Formal Education

Main federal support	($ billions)
Financing of post-secondary education	5.8
University research	0.8
Student aid and scholarships	0.7
Direct federal responsibilities	1.0
Official languages in education	0.3
Other programs	0.4
Total	**9.0**

Recent Initiatives

Recent federal initiatives in the learning area include a national **Stay-in-School Initiative** for high-school students, the creation of **Centres of Excellence** in Canadian universities, the creation of **Canada Scholarships**, and increased support for cooperative education and for career counselling for post-secondary students.

School-to-Work Transitional Arrangements

Main federal support	($ billions)
Canadian Jobs Strategy (youth portion)	0.5

Recent Initiatives

The **Labour Force Development Strategy** calls for a $100-million shift from passive unemployment insurance income support to entry level skills training and cooperative education. Employment and Immigration Canada is also supporting an industry-led program to develop better standards and procedures for interprovincial certification of competence.

Adult Training

Main federal programs	($ billions)
Canadian Jobs Strategy (adult portion)	1.3
Training of federal employees	0.2
Total	**1.5**

Recent Initiatives

In addition to the $100 million above, the **Labour Force Development Strategy** calls for a $700-million shift within unemployment insurance from passive income support to active training support for adults. Increased resources have been targeted to literacy and language training for immigrant women. The **Canadian Labour Force Development Board** gives the private sector a greater role in training decisions. A strategy is being developed to assist the private sector to double its training effort.

	($ billions)
Grand total of federal support	**11**

The Federal Government as a Large Employer

The federal government exercises a role in the system of lifelong learning through programs like those that support native education, learning in federal penitentiaries, and through its role as the largest employer in the country.

The federal government intends to play a leadership role in supporting learning in its own work force. A new Canadian Centre for Management Development has been established with highly ambitious goals. More generally, federal government policy as outlined in the 1990 white paper, *Public Service 2000: The Renewal of the Public Service of Canada*, places high priority on human resource development for federal employees at all levels and in all parts of the country. An internal task force has called for a "radical and essential shift in our way of thinking about training and development... (that) calls for the creation of a **Continuous Learning Culture.**" Recommendations deal both with a strengthened emphasis on training and with nurturing this broader learning culture.

Specific Topics Where Consensus Does Not Yet Exist

From a federal perspective, the most important task over the next year will be to engage in dialogue on priorities and goals, not specific program changes to federal support. It is not always possible, however, to make a clean distinction between long-term objectives and the specific programs needed to accomplish them. The dialogue should therefore allow for discussion of the future role of the federal government and all other stakeholders in the learning system. The ultimate goal is an action plan to which all stakeholders can subscribe and in which all will participate. At the same time, there will be discussion of the proposals for constitutional change, both inside and outside the Special Joint Committee. As this progresses, discussion on priorities and goals for the learning can only enrich the constitutional talks.

In the area of federal investments, for example, there is wide agreement on the need for some change. There is no agreement, however, on how the federal government should change how it supports higher education and employer-based training, or on the ways in which Canadians finance learning by young adults from their late teens to middle 20s.

There have been many proposals to change the form of federal support to post-secondary education from unconditional federal transfers to the provinces to some more directed form of support. The 1991 budget contained a commitment to review the federal transfers to the provinces. Some advocate that the federal government make these more meaningful, perhaps by channelling the funds to research, or to students directly through vouchers or increased student aid or, at minimum, by requiring that the transfers actually be spent on education. Others feel that a lingering federal presence only confuses lines of accountability and would put an end to transfers related to education.

Some would go further and have the federal government transfer all its training and education functions to the provinces. Still others see the value in having a range of country-wide, provincial and local perspectives represented in long-term learning investments. The constitutional proposals recognize explicitly labour market training as an area of exclusive provincial jurisdiction. They also recognize that leadership in the area of skills standards should be exercised jointly by the federal and provincial governments.

There are also many conflicting proposals for rationalizing government support of a learning culture in business. Some proposals stress the role of government in allowing the market for training to work better, for example by providing better statistics or by deregulation of tuition fees. Other proposals would call for increased regulation in areas like paid educational leave.

There are proposals for tax credits for training expenditures. Still others call for levies on large firms to finance increased training. Others call for a penalty on non-trainers, like higher unemployment insurance premiums for companies that do not have acceptable human resource plans.

Another area where there is agreement that something must be done, but no consensus on particular action, is that of the responsibilities for funding the various forms of education and training that may follow secondary school. There is every indication that existing arrangements are resulting in under-investment, particularly in learning for those who do not go on to formal post-secondary education. Proposals usually attempt to restore a better balance between those who benefit from the learning and those who invest in that learning. They include:

- providing all secondary school graduates with a drawing account to be used to pay for their further education — at college, university, in apprenticeship, in remedial or second chance training, or by other authorized means. The drawing account would cover the full cost of most forms of further learning. Additional funds for expensive education, like graduate or professional studies, could be borrowed, with repayment later in life linked to income;
- providing a guarantee of training or a job for young people who have not made a successful transition to work, rather than trying to meet their special needs through programs like unemployment insurance, which assumes that the transition to full-time employment has already occurred; and
- allowing university and college tuition fees to rise gradually, in order to increase equity and investment levels or, alternatively, simply increasing government investments in all forms of post-secondary learning.

These issues are controversial, and opposing views are held deeply.

One conclusion might be that Canadians should concentrate on building those elements of a learning culture and a system of lifelong learning where consensus does exist, allowing the resolution of these controversial issues to evolve over time.

An opposing conclusion might be that debate surrounding the issues described above is unavoidable in the current political environment, essential if we are to build an effective system, and useful in generating the high level of interest needed to launch a decade of reform.

For its part, the federal government believes consultations should begin on these issues that are or should be of concern to all Canadians wherever they live. The federal government wants to act as a catalyst in initiating a dialogue among all stakeholders on the challenges facing our learning system.

CONSULTATIONS:

WHERE DO WE GO FROM HERE?

The purpose of this discussion paper is to increase awareness of the learning challenge before us and to stimulate discussions on the shared national priorities and targets that should guide the federal government and other partners as we build a system of lifelong learning.

Part V offers potential priorities and targets and raises important questions in order to stimulate the search for a national consensus in the coming consultation process.

CONSULTATIONS: WHERE DO WE GO FROM HERE?

IN 1991, THE GOVERNMENT OF CANADA INITIATED BROADLY BASED consultations with Canadians to discuss some of the key steps Canadians must take together to secure our national prosperity in the years ahead. The companion document, *Prosperity Through Competitiveness*, identifies a number of major challenges related to the economic framework. This document focuses on the learning challenges facing our society.

Increased Awareness

This discussion paper is intended to:

- increase awareness of the learning challenge; and
- initiate a broadly based consultation process on the shared national priorities and targets for learning that should guide all stakeholders over the next decade.

The evidence suggests that the consensus found in so many studies, and which is described in this discussion paper, reflects views supported by most Canadians, once they become aware of the facts. But the paper also suggests that many people do not yet realize fully the importance of the links among learning, good jobs, prosperity and the lifestyle we enjoy. Many Canadians are not yet aware of the fast pace of change in other countries, or of the fact that change here must begin with initiatives taken by parents and students, and employers and workers.

Discussions among partners and interested groups about common priorities and targets, the subject of this discussion paper, can play an important part in increasing general awareness, particularly as associations consult with their membership.

But there are other more direct ways of increasing awareness among the general public as well. Several initiatives by the federal government were referred to in the last chapter. For example, many Canadians have seen TV commercials encouraging young people to stay in school. Along with the consultation process on priorities and targets, the federal government is also planning to strengthen general awareness and involve the public in the consultation process. This will certainly involve analyses of Canadians' views as revealed through surveys and a continuation of public communications in the media. Other means will also be explored.

Priorities and Targets for a Decade of Achievement

Clearly, there is no quick and easy answer to the learning challenge facing Canadians. Sustained action will be needed on many fronts, by many partners, for many years.

It is equally apparent that public policies by government cannot replace private action by parents, individual learners, employers, unions, voluntary associations, educators and trainers. Governments can play a supporting role, but the demands and expectations of individuals and private institutions provide the real driving force.

The federal government is committed to initiating discussions that could result in all partners sharing a common vision.

This paper describes a consensus that is emerging from many studies and reports on the elements that might guide our collective actions. A common vision of a desired future appears to underlie many studies. It might be expressed as:

An innovative, competitive economy based on high-skill, high-paying jobs. A society where all Canadians value learning and enjoy the fruits of their learning and labour.

In translating this general vision into more practical terms, some call for national objectives to guide the development of our systems of education and training. Others feel that, given jurisdictional arrangements, this may not be attainable now. But even without explicit common agreement on national objectives, it should be possible to agree on the priorities and targets that can guide harmonious action by many partners over the coming decade.

Priorities for a Decade of Achievement

As an aid to discussion, the following is a possible statement of national priorities that might guide coordinated action over the decade.

The fundamental goals of the decade of achievement are:

- for all Canadians, to increase the level of basic skills that allow people to learn and adapt throughout their lives; and
- for many more Canadians, both young people and adults, to increase excellence in more specialized and advanced skills — particularly those related to the application of S&T — and to continually renew their skills.

This should be done by:

- building a stronger learning culture at home, at school and at work; and
- building a system of lifelong learning that is among the best in the world.

By the end of the decade of achievement:

- **students and parents** should have greatly improved information and knowledge about learning needs and opportunities, and individuals should feel a strong sense of ownership of, and responsibility for, their learning choices;
- **employers** should invest much more heavily in the development of their employees and should foster a strong learning culture that emphasizes human resource development plans linked to larger corporate productivity plans and that encompasses training, career development and work structuring;
- **governments** should promote a learning culture and the institutions of lifelong learning; the links between high skills, good jobs, a strong economy and prosperous society; the creation in the private sector of good jobs in all parts of the economy; adjustment to new high-wage jobs rather than the preservation of existing low-wage ones; and investment in the skills of those without the opportunity to learn and work to their full potential;
- **learning institutions** should cater to the needs of individual users and support excellence through the initiative of highly qualified teachers and trainers, supported by the best possible materials and methods; and
- **all partners** should take action to ensure a more equitable representation of women and men in all aspects of teaching and learning; remedy the underrepresentation of minority groups; ensure that all children enter school ready to learn; and, for learning beyond the legal school-leaving age, improve the balance between those who make and those who benefit from learning investments.

Some Questions for Discussion

From your perspective, do these ideas capture the most important priorities for change? Are they a reasonable basis for partnerships and action? Is the agenda suggested by the priorities too ambitious? Is it not ambitious enough? What should be changed? Should we move beyond identifying shared priorities to guide cooperative action over the next decade and, in addition, attempt to identify common national learning objectives and principles, or would this get us bogged down in jurisdictional issues?

Targets

Traditionally, Canadians have relied on tacit understandings and have not tried to formulate explicit common learning goals, at least at the national level. A major purpose of the coming consultation process will be to test whether general priorities can be, or should be, translated into specific national targets.

The following list of targets is not meant to be definitive, but rather to stimulate discussions and foster consensus building during the consultation process. Because of the lack of hard data, it is difficult to determine precisely how realistic the targets are. But if we could agree on a set of targets that appear to be ambitious yet attainable, then data collection, progress reporting and subsequent fine-tuning could be put in place.

General targets include:

- For all Canadians, to increase the level of basic skills that allow people to learn and adapt throughout their lives.
- For many more Canadians, both young people and adults, to increase excellence in more specialized and advanced skills, particularly those related to the application of S&T, and to continually renew their skills.

Possible End-of-Decade Targets

- Cut the rates of adult illiteracy by half;
- have 90 percent of people by age 25 attain the equivalent of a high-school diploma;
- double the number of community college graduates and university postgraduates in science, engineering and technology, and be a world leader in math and science achievement at all levels of the formal school systems; and
- achieve full representation of women in the fields of math, science and technology at all levels of the formal school systems.

To develop a learning culture at home, at school and at work.

Possible End-of-Decade Targets

- Ensure that the majority of learners (or their parents) have a realistic understanding of the skills requirements of a good-jobs economy and the performance of formal learning institutions;
- all learning institutions have plans that describe the results they expect and reports that describe the actual performance; and
- employers have formal human resource development plans that apply to at least three quarters of all employees in Canada. The plans would encompass training and work restructuring.

To build a system of lifelong learning that is among the best in the world.

Possible End-of-Decade Targets

- Double the amount of time that Canadians, from adolescence through to retirement, spend in structured learning — at school, at home or at work;
- quadruple the amount of learning that employers provide to students through structured work experience and quadruple the amount of training that employers provide to their regular employees;

- create a system of lifelong learning that is among the best in the world at:
  - setting standards of performance and assessing achievement;
  - tracking participation and achievement, understanding what is working best, and informing users of learning needs and opportunities;
  - ensuring that all children start school ready to learn;
  - assisting learners with highly qualified and well-supported teachers and trainers; and
  - assisting learners at all stages to navigate through the system of lifelong learning and into work via a network of mentors, counsellors and facilitators; and
- achieve equitable participation of underrepresented groups in all parts of the lifelong learning system.

Conclusions

Our prosperity and quality of life depend on our success in meeting the learning challenge.

Educators will play a major role in meeting the challenge, as they have in the past. Governments must provide important support. But, fundamentally, the challenge can be addressed only through the changed attitudes, expectations and actions of employers and workers, parents and students. We must all learn to be more serious about learning.

A major change in outlook and attitudes will be difficult to accomplish. It is a challenge however that many Canadians will welcome, a challenge that we ignore at our individual and collective peril. It is our hope that this document, and the coming consultation process, will play a useful role in developing a framework to allow us to work together more easily as we tackle the learning challenge.

In the economy of the future, prosperity will be created — not inherited. That future will be shaped by decisions taken today.

Some Questions

As mentioned in chapter II, the Americans have set specific, ambitious educational goals (goals that will serve as a rallying point even if they prove to be unrealistically ambitious, according to some American critics). Several Asian countries have already transformed their approaches to learning and have linked learning policies with broader economic and social policies. In Europe, action is taking place in individual countries and at the level of the European Community as a whole. Do Canadians have the desire, and the will, to agree to pursue equally high goals here?

Is it desirable to seek a broad national consensus on specific targets for the decade? Is it possible?

What would be the best way of building a consensus on targets? Should the private sector or government take the lead?

Would it be better to seek agreement on measures of performance without specific targets?

If a national consensus proves impossible, should the federal government set targets or performance measures to guide its own actions? If so, what should they be?

Have too many targets been listed? Or too few? Are there important areas that have been missed? Are the targets sufficiently ambitious to provide a real challenge? Are some so ambitious that they are unrealistic?

SELECTED READINGS

Adjusting to Win: Report of the Advisory Council on Adjustment, Jean de Grandpré (1989)

America's Choice: High Skills or Low Wages, Report of the Commission on the Skills of the American Workforce, National Centre on Education and the Economy (1990)

Competitive Advantage of Nations, The, Michael E. Porter, Free Press, New York (1989)

Education and the Economy in a Changing Society, Organization for Economic Cooperation and Development (1989)

Éducation et formation à l'heure de la compétitivité internationale, Association des économistes québécois (1990)

Focus 2000: Report of the Task Force on Education and Training, Canadian Chamber of Commerce (1989)

Further Education and Training of the Labour Force: Canada, Organization for Economic Cooperation and Development (1990)

Good Jobs, Bad Jobs: Employment in the Service Economy, A Statement by the Economic Council of Canada (1990)

Human Dimension of Competitiveness, The, Industry, Science and Technology Canada (1989)

Investing in People: A Strategy to Address America's Work Force Crisis, A Report to the Secretary of Labour, Commission on Work Force Quality and Labour Market Efficiency, U.S. Department of Labour (1989)

Learning Enterprise, The, A.P. Carnevale and L.J. Gainer, American Society for Training and Development and U.S. Department of Labor, Employment and Training Administration (1989)

L'orientation scolaire et professionnelle des élèves : par delà les influences, un cheminement personnel, Conseil supérieur de l'éducation du Québec (1990)

Partners for People: A Human Resource Adjustment and Development Strategy for the 1990s, Ministère de la Main-d'œuvre, de la Sécurité du revenu et de la Formation Professionnelle du Québec on behalf of the provinces and territories (1989)

Presentation to the Province of Manitoba and the Lord Selkirk School Division Number 11, Triple S Community Development Board, Human Resource Development Committee (1990)

Profile of Higher Education in Canada, The Department of the Secretary of State of Canada (1991)

Report of the Task Forces on the Labour Force Development Strategy, Canadian Labour Market and Productivity Centre (1990)

Success in the Works: A Profile of Canada's Emerging Work Force, Employment and Immigration Canada (1989)

Survey of Literacy Skills Used in Daily Activities, Statistics Canada (1990)

Technical Change, Skills and Implication for Basic Learning, International Labour Organization (1990)

To Be Our Best: Learning for the Future, Corporate Higher Education Forum (1991)

Training and Retraining — Implications of Technological Change, International Labour Organization (1987)